REMARKS/ARGUMENTS

Claims 1-10 were previously pending in the application. Claims 11-20 are added. Therefore, claims 1-20 are presented for consideration.

Claims 1-6 are rejected as unpatentable over KUNIO JP2000-192196. This rejection is respectfully traversed.

Claim 1 recites a tensile strength of between 400 and 550 MPa.

By way of example, Tables 2 and 4 on pages 32 and 35 of the present application show various steels having tensile strengths between 400 and 550 MPa.

KUNIO teaches in Sections [0049] and [0050] that the steel of KUNIO should have a high intensity such that a 0.2% proof stress is 551 MPa or more. KUNIO teaches that conventional steel not having a 0.2% proof stress of 551 MPa or more is inferior. Accordingly, based on the teachings of KUNIO, one of ordinary skill in the art would select a steel having a 0.2% proof stress (tensile strength is even greater than 0.2% proof stress) of 551 MPa or greater, not a tensile strength of between 400 and 550 MPa as recited in claim 1 of the present application.

As the reference does not disclose that which is recited and in fact teaches away from the recited range, the recited range would not be obvious to one having ordinary skill in the art.

Claims 2-6 depend from claim 1 and further define the invention and are also believed patentable over the cited prior art.

In addition, claim 2 recites a Z value is in the range of 0.03 to 1.5 where Z = ([%Co] + 1.5[%V] + 4.8[%W]) wherein Co, V and W are in mass percent. As seen in Tables 1 and 2 of KUNIO, each of the examples has a Co percentage of 2.4 or greater. Accordingly, none of the values disclosed by KUNIO would satisfy the recited range of $0.03 \leq Z \leq 1.5$ as recited in claim 2.

Claims 7-10 are rejected as unpatentable over KUNIO in view of FUJITA et al. 6,123,897. This rejection is respectfully traversed.

FUJITA et al. in Tables 7, 17 and 21, for example, (examples where boron is added), teach tension strengths of between about 75.3 and 85.4 kgf/mm^2 (about 769 to 837 MPa). The comparative materials taught by FUJITA et al. are from about 738 MPa to about 830 MPa. FUJITA et al. do not teach or suggest a tensile strength of between 400 and 550 MPa as recited in claim 1.

As seen in Table 7 of FUJITA et al., for the same material the tensile strength is greater than the 0.2% yield strength. As set forth above, KUNIO teaches a 0.2% yield strength of 551 MPa or greater. Accordingly, each of the steels taught by KUNIO would have a tensile strength that is

correspondingly greater than 551 MPa. Therefore, the combination of references would teach a tensile strength greater than 551 MPa and not a tensile strength of between 400 and 550 MPa as recited in claim 1 of the present application. Since claims 7-10 depend from claim 1 and further define the invention, the combination of references would not render obvious claims 7-10.

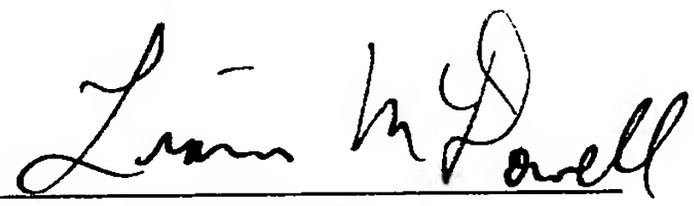
New claims 11-20 correspond to claims 1-10 and include the feature that the mass percent of nickel is from about 0.01 to about 0.95 as disclosed in each of the examples in Tables 1 and 3 of the present application.

KUNIO teaches that nickel is the most important element in suppressing generation of a delta ferrite and should be in the range from 1% to 8%. At less than 1% the nickel cannot inhibit generation of a delta ferrite. Accordingly, the steels of KUNIO must have a nickel percentage of 1% to 8%. A secondary reference that teaches less than 1% could not be combined with KUNIO because such amount (less than 1%) would render KUNIO unsatisfactory for its intended purpose of inhibiting generation of a delta ferrite. Accordingly, it is believed that the new claims avoid the rejection under §103 and are allowable over the art of record.

In view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

Respectfully submitted,

YOUNG & THOMPSON

By 

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